Nathan Joseph Savas

nathan.savas@student.csulb.edu | nsavas | nathansavas | nsavas.github.io

Education

California State University, Long Beach *Exp. Graduation: Dec 2021*

Bachelors (B.S) In Computer Science *Concentration GPA: 3.52*

Relevant Coursework: Analysis of Algorithms, Artificial Intelligence, Intro to Computer Security, Database Fundamentals, Operating Systems, Object Oriented Application Development, Intro to Software Engineering

Experience

Amazon Web Services (AWS) *Remote (CA)*

Software Development Engineer Intern *June 2020 - August 2020*

- Worked with the AWS CodeGuru team to develop a visualization dashboard using React & Redux (TypeScript) to enable time-based analysis of anomalies detected in user accounts
- Developed an algorithm to find intersecting time intervals for a set of anomalies to track activity over time, designing custom Apache Echarts components (Gantt & Line chart) to render results
- Used the Redux-saga middleware library to write simplified asynchronous control flows, isolate application side effects, and run tests on generator functions using Jest

Siemens PLM Software *Cypress, CA*

Software Engineering Intern *May 2019 - January 2020*

- Worked with the NX CAD Validation team to develop a SaaS application using AngularJS that provides a web interface for running visual reports on CAD models to validate design specs
- Developed an internal JavaScript library to provide NX cloud teams with abstractions for fetching report results and rendering the data in a navigation tree UI component
- Integrated library with a markup tool to tag CAD parts with bitmap images related to report results

Projects

Senior Project: PhotoSense.app

Python, JavaScript, AWS

- Worked with a team of 5 to develop a face censoring AI system, deploying a Keras CV model as a RESTful API to process image requests from various web clients (web app, bots, chrome ext.)
- Integrated Flask API with a Redis cache to process images in batch for optimized memory usage
- Developed web-based drawing tools using the Canvas API to let users edit, add, and remove image segmentations detected by the CV model directly in our React application

US City Chemical Release Visualizer

JavaScript, PostgreSQL

- Led a team of 3 to develop a web mapping application using React & Mapbox to visualize 30+ years of EPA Toxic Release Inventory (TRI) data for waste facilities in US cities
- Developed a RESTful API with Express to fetch data from a PostgreSQL + PostGIS database
- Used the Mapbox JS SDK to plot geospatial data on a map interface and React-Vis to render visualization components to provide insight into a city's toxic release history

Skills

Programming Languages: Java, JavaScript, TypeScript, Python, C++, SQL, HTML, CSS

Frameworks/Tools: React, Redux, Express, Node, Git, PostgreSQL, Flask, Redis, Docker, AWS Core Services